January—June 2014

INSTALLATION & SERVICE COURSES

(Classes noting CEU hours are approved for State of Alabama Contractor Continuing Education and/or NATE CEUs)

1201 – Foundations for Troubleshooting Gas Furnaces: (27 State and NATE CEUs) 4 Days. Systematic implementation of dual fuel system analysis procedure. Gain working knowledge of dual fuel heat pump systems; proper venting, sizing of gas line, sequence of operation, and proper system performance.

January 27-30 February 24-27 April 14-17 May 12-15

1501E - Basic Refrigeration & HVAC Operations: (12 CEUs) 2 Days. Entry level; familiarization of refrigerant components, cycle of operation and problem recognition.

May 19-20

1501 - Foundations for Troubleshooting HVAC Refrigerant Systems: (27 State and NATE CEUs) 4 Days. Systematic implementation of the HVAC system analysis procedure and validation of actual sealed system performance of fully operational HVAC equipment.

January 6-9 February 24-27 April 28-May 1

1502E - Basic HVAC Electrical Operations: (12 CEUs)2 Days. Entry level; familiarization of HVAC electrical terminology, component identification and basic equipment functions.

May 21-22

1502 - Foundations for Troubleshooting HVAC Electrical Systems: (27 State and NATE CEUs) 4 Days. Systematic implementation of HVAC system analysis procedure; and construction of an HVAC electrical system. Gain working knowledge of the basic concepts of electricity (i.e. volts, amps, capacitance, inductance, reactance, power factor, ohm's law, series/parallel circuits, etc.) February 3-6 March 24-27 April 28-May 1

1503 - Troubleshooting HVAC Refrigerant Systems: (27 State and NATE CEUs) 4 Days. (Prerequisite 1501) Development of refrigerant system troubleshooting skills through proper and systematic routines in a laboratory setting closely simulating the technician's normal work environment. January 27-30 May 12-15

1504 - Troubleshooting HVAC Electrical Systems: (27 State and NATE CEUs) 4 Days. (Prerequisite 1502) Development of electrical system troubleshooting skills through proper and systematic routines in a laboratory setting closely simulating the technician's normal work environment. Observe operation of live equipment; verify various failure operating modes; and identify exact cause of various system failures. **January 21-24 March 10-13 June 9-12**

1505 - Servicing HVAC Refrigerant Systems: (27 State and NATE CEUs) 4 Days. Brazing, unit fabrication, evacuation and charging. February 10-13 March 10-13 May 19-22

1506 - Servicing HVAC Electrical Systems: (27 State and NATE CEUs) 4 Days. (Prerequisites 1502 & 1504) Covers such areas as functions of solid state components used in HVAC equipment; use of meters and equipment to test and validate proper operation of components; programming of solid state thermostats to operate equipment at specific modes on specific time schedules and override capabilities for major brands of equipment.

February 17-20 March 31-April 3

International Ground Source Heat Pump Assn. (IGSHPA) Closed Loop Certification: (19 State CEUs:) 3 Days. Provides the HVAC contractor with skills necessary to properly install and evaluate residential geothermal systems. Certification exam given at the conclusion of course. A must for quality geothermal installations. One year membership in IGSHPA included in price. March 31 – April 2

1905 - Refrigerant Recovery Certification: January 13 April 28

State Board Review (20 NATE CEUs): January 13-15 April 14-16 June 2-4

HVAC Technician Certification Review and NATE Test (14 State CEUs) May 19-21

R410A Safety Certification (8 State CEUs): January 14 April 29

RMV - Residential Mechanical Ventilation Installation: **(14 State and NATE CEUs) 2 Days. Provides invaluable information for those involved with designing and installing residential mechanical ventilation systems including HRV's and ERV's. Taught by a HRAI certified instructor, this certification class covers the fundamentals of air quality assessment, system requirements and the design and installation of mechanical ventilation systems.**

January 21-22

Duct & Envelope Tightness: (12 State CEUs): This two-day course is designed to introduce the skills necessary to become a Duct and Envelope Tightness (DET) Verifier, certified to perform the diagnostic testing required for new homes by the 2009 IRC/IECC with Alabama amendments. Online math course must be completed prior to attending. Details given at registration.

January 6-7	**January 27-28**	**February 17-18**	**June 2-3**	**June 16-17**
January 8-9	**January 29-30**	**February 19-20**	**June 4-5**	**June 18-19**

APPLICATION COURSES

Heat Pump Overview: (12 CEUs) 2 Days. Familiarization of heat pump operations, efficiency ratings, dual-fuel, air-to-air, and geothermal systems.

January 21-22 **April 7-8**

1802 - Residential Load Calculations: (27 State and NATE CEUs) 4 Days. Develop industry accepted knowledge and skills of sizing residential heating and cooling equipment through hands-on training in a classroom and laboratory setting. (Based on the Manual J approach to load calculations.)

February 17-20 **May 12-15**

1803 - Residential Duct Design: (27 State and NATE CEUs) 4 Days. (Prerequisite 1802) Complete tasks such as determining the design CFM for sizing a duct system and proper air volume for each conditioned zone, based on design heat gain/loss. Determine the type, size, number and placement of supply diffusers and return air grilles; select proper equipment configuration for selected applications; draw layout of locations and size trunk, branch and return duct. (ACCA Manual D method.)

April 14-17 **June 16-19**

1804 – Marketing Applications of Ohm's Law: (12 CEUs) 2 Days. Assists Marketing Personnel in developing a working knowledge of Ohm's Law and power formula manipulation.

January 7-8 **June 9-10**

1807 - Duct Board Fabrication & Installation: (27 State and NATE CEUs) 4 Days. Inexperienced personnel learn to understand and apply recommended methods and techniques for fabricating duct from fibrous board material. Experienced personnel are provided the opportunity to enhance their knowledge of fibrous duct fabrication and installation methods and practices.

February 3-6 **May 19-22**

RightSuite: (14 State and NATE CEUs) 2 Days. Designed to enhance the participant's skills to use computer software applications to calculate residential loads, design ducts, and to introduce the other program modules.

January 21-22 **March 10-11** **April 28-29** **June 16-17**

Go to www.alabamapower.com/hvac or call 1-800-634-0154 to register